

**Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

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FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of

Biennial Regulatory Review -- Amendment)
of Parts 0, 1, 13, 22, 24, 26, 27, 80, 87,)
90, 95, 97, and 101 of the Commission's)
Rules to Facilitate the Development and)
Use of the Universal Licensing System in)
the Wireless Telecommunications Services)

WT Docket No. 98-20

Amendment of the Amateur Service Rules)
to Authorize Visiting Foreign Amateur)
Operators to Operate Stations in the)
United States)

WT Docket No. 96-188

RM-8677

To: The Commission

PETITION FOR RECONSIDERATION

NATIONAL SPECTRUM MANAGERS ASSOCIATION

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SUMMARY

In a Report and Order (the "Order") the Commission established rules implementing a Universal Licensing System ("ULS") in the Wireless Telecommunications Services. These rules included revisions to the frequency coordination procedures for wireless licensees proposing major and minor amendments and modifications.

The Commission's goal in revising the frequency coordination procedures for Part 101 fixed terrestrial point-to-point microwave service ("FS") licensees and Part 90 mobile service licensees was to "make the rules as consistent as possible among the wireless services."¹ NSMA generally supports such streamlining of the rules. However, imposing uniform frequency coordination procedures on Part 101 FS and on Part 90 mobile service licensees would not serve the public interest because well-established safeguards against harmful interference would be eliminated.

To avoid this problem, NSMA herein petitions the Commission to reconsider the following frequency coordination requirements:

- In the Order, the Commission limits frequency coordination requirements to "major" changes. Previously, Part 101 licensees were required to frequency coordinate all changes or modifications. NSMA requests that the Commission resurrect the former rule. Frequency coordination should be required for all changes or modifications in the Part 101 service, regardless of their classification as "major" or "minor."
- In the Order, the Commission limits the parties that must receive prior coordination notices. Previously, Part 101 licensees were required to notify all affected parties. NSMA requests that the Commission require that Part 101 licensees and applicants notify all potentially-affected parties when a technical change is proposed.

¹Order at ¶ 84.

Unless the Commission reinstates its frequency coordination procedures for FS, frequent interference problems could occur, databases could become corrupted making spectrum studies meaningless, and spectrum efficiency could be seriously compromised. The result could mean turmoil for the FS industry and an increased workload for the Commission in resolving related disputes.

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To: The Commission

PETITION FOR RECONSIDERATION

Pursuant to Section 1.106 of the Commission's Rules,² the National Spectrum Managers Association ("NSMA"),³ by its attorneys, hereby seeks reconsideration of certain rulings made by the Commission in its Report and Order ("Order") in the above-

²47 C.F.R. § 1.106 (1999).

³The NSMA, established in 1984, is a voluntary association of individuals involved in the frequency coordination for fixed terrestrial point-to-point microwave service ("FS"), PCS and satellite earth stations. NSMA supplements the Commission's coordination rules with procedural and technical recommendations developed in an open industry forum of coordinators, licensees and manufacturers. The NSMA's objective is to make the frequency coordination process more efficient and effective.

captioned rulemaking proceeding.⁴ In the Order, the Commission established rules implementing a Universal Licensing System ("ULS") in the Wireless Telecommunications Services. These rules included revisions to the frequency coordination procedures for wireless licensees proposing major and minor amendments and modifications.

The NSMA participated actively in the underlying rulemaking.⁵ It supports the Commission's efforts to facilitate the development and use of the ULS in the Wireless Telecommunications Services. The ULS is a major step in establishing a more effective, efficient and accessible licensing process.

In the Order, the Commission made the frequency coordination procedures for Part 101 FS licensees and Part 90 mobile service licensees uniform. While NSMA generally supports such streamlining of the rules, imposing uniform frequency coordination procedures on Part 101 FS and on Part 90 mobile service licensees would not serve the public interest.

Successful frequency coordination is critical because it ensures that incumbents are protected against harmful interference. To guarantee that this objective is met, the substantial differences in provision of FS and mobile services compels different coordination procedures. Unless the Commission changes its frequency coordination

⁴The Order was released by the Commission on October 21, 1998, and it was published in the Federal Register on December 14, 1998. 63 FR 68903 (Dec. 14, 1998).

⁵NSMA filed Comments in this proceeding on May 21, 1998, and Reply Comments were filed on June 16, 1998.

procedures to address these differences, frequent interference problems could occur, causing turmoil for the FS industry and an increased workload for the Commission in resolving related disputes.⁶ Thus, NSMA herein petitions the Commission to reconsider the following frequency coordination requirements:

- In the Order, the Commission limits frequency coordination requirements to “major” changes. Previously, Part 101 licensees were required to frequency coordinate all changes or modifications. NSMA requests that the Commission resurrect the former rule. Frequency coordination should be required for all changes or modifications in the Part 101 service, regardless of their classification as “major” or “minor.”
- In the Order, the Commission limits the parties that must receive prior coordination notices. Previously, Part 101 licensees were required to notify all affected parties. NSMA requests that the Commission require that Part 101 licensees and applicants notify all potentially-affected parties when a technical change is proposed.

⁶Numerous essential services depend upon interference-free FS. Public health and safety users depend upon reliable and available FS frequencies for delivery of their services to the public. Local exchange carriers and Competitive Access Providers, cellular telephone companies, utilities, railroads, petroleum companies, financial institutions, and federal, state and local governments use FS to support their network operations. Emerging wireless telecommunications, especially PCS, rely upon FS users for spectrum to provide their services and rely upon FS facilities in other bands to support their operations. These FS users frequently are the cornerstone of supervisory and operational programs designed to deliver essential products and services to the public. Indeed, FS users serve specific industrial, public safety, and commercial requirements of many companies and public agencies that constitute much of this nation’s infrastructure.

**MOBILE (AREA COVERAGE) SERVICES AND FS (POINT-TO-POINT) ARE
DISTINCT AND THE COMMISSION SHOULD TREAT THEM DIFFERENTLY**

In the Order, the Commission repeatedly asserts its goal of “uniformity in the rules” and the consistent application thereof.⁷ NSMA cautions the Commission not to be so concerned with the uniformity of its rules that the entire coordination process is subverted. Although the new coordination rules established in the Order may be adequate for Part 90 users, it is imperative that the Commission mandate frequency coordination for all technical changes by Part 101 users. The differences in the provision of service between Part 90 and Part 101 require different coordination procedures.

The traditional coordination process for Part 90 service has been substantially different than the process for Part 101 service. Yet the Commission, in the new rules, treats them the same. There were legitimate reasons for the differences. For example, if a police station were to move its mobile base station a mile away, the relocation would have a minimal effect on its service area. By contrast, because FS antennas are highly directional, even a one degree azimuth change in the main beam could be critical.

The FS is path-specific unlike the mobile service, which is area-specific. It is impossible to have the same frequency coordination rules for point-to-point FS and area-coverage services without having a complete failure of one.

⁷Order at ¶ 84.

The important differences between the two services justify different treatment by the Commission. For instance, in the FS, the critical aspect of frequency coordination is plotting the coordinates EXACTLY where the antenna is placed. In area-coverage services, antenna placement is not as critical and minimal movement of the antenna does not disrupt the service or surrounding services. The Commission should recognize the important differences between the Part 90 and Part 101 services and treat them accordingly.

**THE COMMISSION MUST REQUIRE FREQUENCY COORDINATION FOR
ALL CHANGES BY PART 101 APPLICANTS AND LICENSEES
THAT POTENTIALLY MAY CAUSE INTERFERENCE**

In the Commission's effort to make the rules as consistent as possible among the wireless services, it weakened the frequency coordination requirements for Part 101 users. Specifically, in the Order, the Commission deleted the requirement that frequency coordination must be performed by Part 101 applicants or licensees filing amendments and modifications that involve changes to technical parameters, regardless of the classification of the technical change.⁸ Under the new rules, frequency coordination is required only for a "major" change.

The prior system in Part 101 of mandatory frequency coordination for all changes was quite useful and efficient. In fact, the Commission saw relatively few instances of complaints about harmful interference because potential problems were resolved by the parties before any intervention was needed.

⁸Order at ¶ 87.

However, in the Order, the Commission amended its rules to require frequency coordination only for those technical changes that now are classified as “major.”⁹ Unfortunately, many of the changes that the Commission has classified as “minor” potentially could cause significant interference. For example, a change of one second in latitude or longitude could have a great impact on the interference environment where a short microwave path or close proximity to another station is involved. Frequency coordination, however, determines the likelihood of interference even for a “minor” change. Reinstating the old rule would enable coordinators to continue maintaining accurate up-to-date databases for interference protection purposes and for utilization of new paths.

NSMA is not seeking reclassification of certain technical changes from minor to major. In fact, the filing or application procedure is separate and apart from the frequency coordination process. The Commission’s definitions of major and minor changes for FILING purposes is not disputed. Rather, it is the frequency coordination process that should not be subject to these arbitrary definitions of major and minor changes.

NSMA is concerned that the Commission’s decision to limit frequency coordination will have a grave impact on FS deployment. This problem is especially acute in an environment where available spectrum is decreasing.

⁹Id.

The most serious problem occurs when databases are not maintained accurately. While the ULS will provide ministerial information, much of the technical and prior coordinated information will be unavailable if "minor" changes are not frequency coordinated.

Interference studies evaluate interference to and from a user based upon information available in the databases. Without the reliable technical information in the databases, these studies are meaningless. Under these circumstances, operation by users that make "minor" technical changes without frequency coordination can destroy interference-free operation, strain spectrum efficiency,¹⁰ and corrupt databases making spectrum studies pointless.¹¹ Thus, efficient spectrum usage, supported by expansive, rather than limited, frequency coordination requirements, is an absolute necessity.

Curing this problem is simple. The first sentence of Section 101.103(d)(1) of the Commission's rules, requiring prior frequency coordination before usage, is based upon the notion of interference potential.¹² The second sentence of the original

¹⁰For example, a one degree change in azimuth, which the Commission has classified as "minor," does not have to be coordinated. However, this change still could potentially cause harmful interference. Without frequency coordination or notification of the change to all affected parties, spectrum is not utilized efficiently.

¹¹In order to prevent such problems, NSMA has filed a Petition for Interim Relief contemporaneously with this pleading to delay the effective date of the ULS rule requiring only major changes to be prior coordinated.

¹²"Proposed frequency usage must be prior coordinated with existing licensees, permittees and applicants in the area, and other applicants with previously filed applications, whose facilities could affect or be affected by the new proposal in terms of frequency interference on active channels, applied-for channels, or channels coordinated for future growth." 47 C.F.R. § 101.103(d)(1) (1999).

Section 101.103(d)(1), which the Commission now has modified in the Order, recognized that any amendment to a pending application could potentially cause interference.¹³ These original rules were promulgated in conjunction with the FS industry for efficient use of the spectrum. The FS environment has not changed such that prior coordination for “minor” changes no longer is needed. In fact, new users are so frequently entering the FS environment that prior coordination is a necessity now more than ever.

Thus, the second sentence of Section 101.103(d)(1) should be reinstated to require that ALL technical changes must be prior coordinated. In addition, NSMA requests that the Commission also reinstate Section 101.29(c)(1)(viii) of the Commission’s rules requiring any changes or combination of changes which would cause harmful interference to be frequency coordinated.¹⁴

**THE COMMISSION SHOULD CLARIFY THAT ALL AFFECTED PARTIES
MUST BE NOTIFIED FOR PART 101 MINOR TECHNICAL CHANGES**

In its Order, the Commission states that it is sufficient for minor technical changes to be reported only to entity(ies) with which it normally engages in

¹³“Coordination must be completed prior to filing an application for regular authorization, or an amendment to a pending application, or any major modification to a license.” 47 C.F.R. § 101.103(d)(1) (1998). In addition to coordinating all new paths, the amended rule now only requires coordination for “major” amendments to pending applications where the old rule required coordination for ANY amendment. 47 C.F.R. § 101.103(d)(1) (1999).

¹⁴47 C.F.R. § 101.29(c)(1)(viii) (1998). For uniform purposes, NSMA requests that the Commission also delete new Section 1.929(a)(5) which defines a major amendment as any change requiring frequency coordination. This rule is counter to the idea that all changes should be frequency coordinated.

coordination.¹⁵ NSMA requests that the Commission clarify that, for Part 101 users, this notification must be sent to all potentially-affected parties.

The mobile wireless industry also differs from the FS industry in the notification procedure for minor changes. Notification for Part 90 users typically means that a minor technical change would be reported to a “certified coordinator.” The industry practice is to have one coordinator per Part 90 service.¹⁶ However, Part 101 services do not have one “certified coordinator.” In many instances, each licensee may be its own coordinator. Thus, the FS industry has numerous coordinators, making the maintenance of an accurate and up-to-date database mandatory for interference-free service.

Traditionally, the coordination process for Part 101 has been simple yet effective. If a minor technical change is to be made by a Part 101 licensee or applicant, all affected parties are notified. If the change does not increase the potential for interference, no response is required. This part of the process can be completed in the same day. If the change increases the interference potential, then the process of rectifying the conflict begins. Even this process is less time-consuming and expensive than if the harmful interference is not discovered until after operation begins and the Commission is notified of the problem.

¹⁵Order at ¶ 88.

¹⁶For example, PCIA maintains the database for the Business and Industrial Services operating under Part 90.

The following are two examples of catastrophic events resulting from "minor" changes that are not reported to all affected parties and thus are not prior coordinated:

- 1) A fixed microwave licensee operating in the 6 GHz band employs an Andrew Model UHX 10-59J antenna. At an angle of $\pm 95^\circ$ from boresite, this antenna provides 81dB discrimination. If the licensee changes the antenna to an Andrew Model PL 10-59D at the same angle of $\pm 95^\circ$ from the boresite, it now only has a 45dB discrimination. This change decreases the discrimination by 36dB and increases the power approximately 4000 times. However, this would be considered a "minor" change by the Commission because the two antennas still would have the same beamwidth of 1.1 degrees. Therefore, the Commission would allow the switching of antennas even though the discrimination value would be greatly diminished and the power intensity correspondingly increased.
- 2) A licensee employing the Andrew Model UHX 10-59J antenna changes the azimuth one degree from one degree to two degrees off the boresite, a "minor" change not requiring frequency coordination or notification to all affected parties. This "minor" change would cause a 23dB change in the discrimination value and an increase in power by almost 200 percent.

It is clear that these "minor" changes could be unacceptable. Therefore, prior coordination to protect against such problems is necessary. Unless the Commission requires the global notification historically required in the FS, these problems could become commonplace.

Finally, the Commission also eliminated many of the data submission requirements for the FS service. Thus, it is even more critical that frequency coordination be performed and all technical changes be reported to all affected parties so that databases can be kept up-to-date and accurate.

CONCLUSION

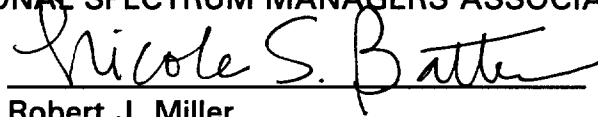
For the foregoing reasons, NSMA respectfully requests that the Commission reconsider those aspects of its Order stated herein. NSMA urges the Commission to hold steadfast to the years of successful frequency coordination to all affected parties for ALL technical changes.

Specifically, all technical changes in Part 101 services, regardless of their classification as major or minor, should be prior coordinated. In addition, for Part 101 users, all affected parties should be notified of any technical change.

Respectfully submitted,

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